Understanding premature **infant lungs**

If your baby was born early, you already know how fragile preemie lungs can be.

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**Preterm lungs**

![Preterm Lung Image]

24–35 Weeks Gestational Age

**Term lungs**

![Term Lung Image]

36 Weeks Gestational Age to 3 Years of Age

Adapted from Moore and Persaud 2008.

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**Babies born early have lungs that are smaller and less developed at birth than those of full-term babies.**
Premature birth interrupts the final stages of normal lung development

**Estimates of lung volume at birth**

Alveoli are not uniformly present until 36 weeks gestational age (GA)

<table>
<thead>
<tr>
<th>Lung Volume (mL)</th>
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<tbody>
<tr>
<td>Full term (≥40 weeks GA)</td>
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<tr>
<td>34 weeks GA</td>
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52% of the lung volume seen in full-term infants

- A preemie’s airways are smaller and more narrow than a full-term baby’s airways
- Babies born early (before the 36th week of pregnancy) have not received the full transfer of maternal antibodies to protect them against severe RSV disease
- Even as your premature infant starts to look healthy and strong, babies born early are at high risk for severe RSV disease, in part due to underdeveloped lungs
- A lung infection from RSV can cause clogged airways and serious breathing problems that might lead to hospitalization